

Bacteriology and sensitivity patterns of pyogenic meningitis at Kenyatta National Hospital, Nairobi, Kenya.

Abstract:

A descriptive cross sectional study on bacteriology and sensitivity patterns of laboratory-proven pyogenic meningitis was carried out over a six month period. A total of 92 patients (52 adults, 40 children) were studied. In 75 (82%) of the cases, the cerebrospinal fluid cultures were bacteriologically positive. Common isolates included *Streptococcus pneumoniae* (45%), *Neisseria meningitidis* (14%) and *Haemophilus influenzae* (12%). Other isolates included *Cryptococcus neoformans* from four (4.3%) adults who were also HIV-1 positive. Sensitivity to antibiotics was determined using the disk diffusion method. There was no resistance to chloramphenicol among the three most common bacterial isolates. However, 7% and 15% of *Streptococcus pneumoniae* and *N. meningitidis* isolates, respectively, were resistant to crystalline penicillin. Twenty seven percent of *Haemophilus influenzae* was resistant to ampicillin. Sensitivity of the three organisms to the third generation cephalosporin (ceftazidime, cefotaxime, ceftriaxone) a second generation cephalosporin (cefuroxime) and augmentin was almost 100%. We recommend that chloramphenicol and crystalline penicillin or ampicillin be initial blind therapy for adults and older children with pyogenic meningitis and ampicillin and chloramphenicol for pre-school children. The above cephalosporins and augmentin are alternative therapy but their use will be limited by cost